

GenCore version 5.1.3  
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OM nucleic - nucleic search, using sw model

Run on: December 6, 2002, 22:09:46 ; Search time 230 Seconds

(without alignments)  
14931.728 Million cell updates/sec

Title: US-10-025-514-15  
Perfect score: 1525

Sequence: tcttagaccatggaaacctt.....ccagtccaaaggccctagtcgac 1525

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 2185239 seeds, 1125999159 residues

total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : N\_Geneseq\_101002:\*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the total score distribution, and is derived by analysis of the result being printed,

### SUMMARIES

Result No.	Score	Query	Match	Length	DB	ID	Description
1	1525	100.0	1525	24	ABK8025		DNA sequence encode
2	1197.4	78.5	1582	24	ABK8027		DNA sequence encode
3	1197.4	78.5	1756	24	ABK8026		DNA sequence encode
4	1191.6	78.1	1525	24	ABK8022		DNA sequence encode
5	1188.8	78.0	1756	24	ABK8023		DNA sequence encode
6	1187	77.8	1582	24	ABK8024		DNA sequence encode
7	1182	77.5	1182	24	ABK8015		DNA sequence encode
8	628.4	41.2	1260	19	AAV1730		DNA sequence encode
9	432.2	28.3	1312	16	AAQ89254		DNA sequence encode

OS	OS	Location/Qualifiers
XX	XX	Key
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		9..1520
		/*tag= b
		/product= "rSLAP1 fusion protein"
		12..1193
		/*tag= C
		/note= "AAV coding region"
		1194..1196

Nucleotide sequence Human alpha1-antit  
cdNA encoding novel Native coding sequenc  
Human alpha-1 anti- Thyroid cancer rel  
Human cDNA differen Thyroid cancer rel  
Sequence encoding Human alpha1-antitrypsin  
Nucleotide sequence Human alpha1-antitrypsin  
Alpha-1-antitrypsin Entire sequence of Human alpha1-antitrypsin  
Sequence encoding Sequence of human Osteoarthritis tis  
Sequence of alpha- Human alpha1-antitrypsin  
Alpha-1-antitrypsin  
Sequence encoding Sequence of human Protease inhibitor Recombinant squirrel Alpha-1-antitrypsin

### ALIGNMENTS

RESULT 1  
ID ABK8025 standard; DNA: 1525 BP.  
AC ABK8025;  
XX DT 07-OCT-2002 (first entry)  
DE DNA sequence encoding rSLAP1 fusion protein.  
XX KW rSLAP1; gene; ds; Alzheimer's disease; tumour angiogenesis;  
KW malaria; emphysema; asthma; chronic obstructive pulmonary disease;  
KW cystic fibrosis; otitis media; otitis externa; HIV; psoriasis; eczema;  
KW human immunodeficiency virus; atopic dermatitis; muscular dystrophy;  
KW herpes; ulcerates; sepsis; rheumatoid arthritis; periorbital disease;  
KW tumour metastasis; osteoporosis; glomerulonephritis; hypertension.  
XX OS Homo sapiens.  
XX OS Synthetic.

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  1197..1517
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  /note= "SLAP1 coding region"
  FT msc_feature
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  PN XX
  PD 27-JUN-2002.
  XX
  PF 18-DEC-2001; 2001IWO-US49256.
  XX
  PR 18-DEC-2000; 2000US-256699P.
  PR 20-NOV-2001; 2001US-331966P.
  XX
  (ARRI-) ARRIVA PHARM INC.
  XX
  PI Barr PJ, Gibson HL, Pemberton P;
  XX
  WPI: 2002-500631/53.
  DR P-PSDB; AAU99884.
  XX
  Novel fusion protein useful for inhibiting protease activity associated
  PT with a disorder such as emphysema, asthma, comprises a first protease
  PR inhibitor comprising alpha 1-antitrypsin and a second protease
  PR inhibitor -
  XX
  PS Example 3; Page 89-90; 134pp; English.
  XX
  This invention relates to a novel fusion protein comprising a first
  CC protease inhibitor comprising an alpha1-antitrypsin or its functionally
  CC active portion and a second protease inhibitor or its functionally
  CC active protein. The fusion proteins of the invention may act as an
  CC inhibitor of protease activity. The fusion protein of the invention
  CC is useful for inhibiting protease activity associated with a disorder
  CC such as emphysema, asthma, chronic obstructive pulmonary disease,
  CC cystic fibrosis, otitis media, otitis externa, or HIV infection, or
  CC for treating an individual suffering from or at risk for a disease or
  CC disorder involving unwanted protease activity. The proteins are useful
  CC for treating dermatological diseases such as atopic dermatitis, eczema
  CC and psoriasis, in inflammatory responses to viral infection, and for
  CC treating herpes infection, corneal or epidermal ulceration, chronic
  CC non-healing wounds, sepsis, rheumatic arthritis, periodontal disease,
  CC tumour metastasis and tumour angiogenesis, gastric ulceration,
  CC osteoporosis, Paget's disease, glomerulonephritis, scleroderma, malaria,
  CC bacterial infection, Alzheimer's disease, hypertension and muscular
  CC dystrophy. The present sequence represents the DNA encoding the
  CC rSLAP1 fusion protein of the invention.
  XX
  Sequence 1525 BP; 467 A; 287 C; 314 G; 457 T; 0 other;
  SQ
  Query Match Score: 100.0%; Length: 1525;
  Best Local Similarity: 100.0%; Pred. No.: 0;
  Matches: 1525; Conservative: 0; Mismatches: 0; Indels: 0; Gaps: 0;
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QY	301	AAGAGTTGTGAGACTTGAATCACAACCTGATCTCAATTGCAATTAACTACTGGTAACG	360
Db	301	AAGAGTTGTGAGACTTGAATCACAACCTGATCTCAATTGCAATTAACTACTGGTAACG	360
QY	361	GTTTATTGTTGCTGAAGGTTAAATTGTTGACCAATTCTCTAGAAAGACGTCAGAAC	420
Db	361	GTTTATTGTTGCTGAAGGTTAAATTGTTGACCAATTCTCTAGAAAGACGTCAGAAC	420
PD	421	TATATCATAGTAGGCCTTTACCGTTAAATTGTTGACTGAGGACTAAAGAGAAA	480
XX	421	TATATCATAGTAGGCCTTTACCGTTAAATTGTTGACTGAGGACTAAAGAGAAA	480
PF	421	TATATCATAGTAGGCCTTTACCGTTAAATTGTTGACTGAGGACTAAAGAGAAA	480
PR	481	TTAATGATAATGTTGAGAAAGGCCACGGTAAATGTTGACTTAAGAAATTAG	540
PR	481	TTAATGATAATGTTGAGAAAGGCCACGGTAAATGTTGACTTAAGAAATTAG	540
PA	481	TTAATGATAATGTTGAGAAAGGCCACGGTAAATGTTGACTTAAGAAATTAG	540
XX	481	TTCAGGAGTTAAAGATGTTGACCTAGTAACATTTCAACGTTGACCTAGTAA	600
XX	541	ATCGTGATACCGCTTCGCACTGTTAACTATTTTCAACGGTAATGTTGAACTC	600
XX	541	ATCGTGATACCGCTTCGCACTGTTAACTATTTTCAACGGTAATGTTGAACTC	600
DR	541	ATCGTGATACCGCTTCGCACTGTTAACTATTTTCAACGGTAATGTTGAACTC	600
DR	601	CTTTCAGGTTAAAGATGTTGACCTAGTAACATTTCAACGTTGACCTAGTAA	660
XX	601	CTTTCAGGTTAAAGATGTTGACCTAGTAACATTTCAACGTTGACCTAGTAA	660
PT	601	CTTTCAGGTTAAAGATGTTGACCTAGTAACATTTCAACGTTGACCTAGTAA	660
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PR	661	AAGTTCATGATGAAAGACTGGTATGTTCAATTGCAAAAAATTAAAGT	720
PS	721	CTTGGGCTTATTAAATGAAAGTATTAGTTGACTGCTACTGCTATTTTTACAGACG	780
XX	721	CTTGGGCTTATTAAATGAAAGTATTAGTTGACTGCTACTGCTATTTTTACAGACG	780
CC	721	CTTGGGCTTATTAAATGAAAGTATTAGTTGACTGCTACTGCTATTTTTACAGACG	780
CC	781	AAGGTAGCTCACATTAGAAATGAGCTGACATGACATTAAATTGTTTACAGACG	840
CC	781	AAGGTAGCTCACATTAGAAATGAGCTGACATGACATTAAATTGTTTACAGACG	840
CC	841	AGAACGAGATCGTGTGACCTGCTGACCTGCAAGTTAACCGTTACTTACCGTACTT	900
CC	841	AGAACGAGATCGTGTGACCTGCTGACCTGCAAGTTAACCGTTACTTACCGTACTT	900
CC	901	ACGACTTAAATCTGTGTTAGCCAGTTAGGTATTACCAAGTTAACGTTAACGTT	960
CC	901	ACGACTTAAATCTGTGTTAGCCAGTTAGGTATTACCAAGTTAACGTTAACGTT	960
CC	901	ACGACTTAAATCTGTGTTAGCCAGTTAGGTATTACCAAGTTAACGTTAACGTT	960
CC	961	ATTGAGGTTGTTACAGAAAGCTCCATTAAATTGTAAGCTTACAGCTTACAGCG	1020
CC	961	ATTGAGGTTGTTACAGCTTACAGCTTACAGCTTACAGCTTACAGCG	1020
CC	1021	TCTTAACATTGATGAAAGGTACCGGGCGCCGGCGPATGTTCTGGAAAGCTATC	1080
CC	1021	TCTTAACATTGATGAAAGGTACCGGGCGCCGGCGPATGTTCTGGAAAGCTATC	1080
Db	1021	GAAACACTAAAGGCCATTGTTATGCTTCTGTGATGTCAGTCAGTCAGTCAG	1140
Db	1081	CAATGAGCATTCACCAAGGTTAAATTAAACCATTCCTTCTGTGATGTCAGTCAG	1140
Db	1081	CAATGAGCATTCACCAAGGTTAAATTAAACCATTCCTTCTGTGATGTCAGTCAG	1140
QY	1141	AGAACACTAAAGGCCATTGTTATGCTTCTGTGATGTCAGTCAGTCAGTCAG	1200
Db	1141	AGAACACTAAAGGCCATTGTTATGCTTCTGTGATGTCAGTCAGTCAGTCAG	1200
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Db	1201	GAAAGCTTCAAGGGCGGTGTTGTCACCAAAGAAAGCTGGCTCAATTGTTGAGATA	1260
QY	1201	GAAAGCTTCAAGGGCGGTGTTGTCACCAAAGAAAGCTGGCTCAATTGTTGAGATA	1260
Db	121	TGTTAGACCATCGACTTTAAATTACTCCAAATTAGCCGAATTGCTTTTCCTA	180
QY	61	ACCAAGACCATCGACTTTAAATTACTCCAAATTAGCCGAATTGCTTTTCCTA	180
Db	61	ACCAAGACCATCGACTTTAAATTACTCCAAATTAGCCGAATTGCTTTTCCTA	180
QY	121	TGTTAGACCATCGACTTTAAATTACTCCAAATTAGCCGAATTGCTTTTCCTA	180
Db	121	TGTTAGACCATCGACTTTAAATTACTCCAAATTAGCCGAATTGCTTTTCCTA	180
QY	181	TTGGCACTGCTTCGCTTACGTCATCAAGTAAATTGCTTACGAGATT	240
Db	181	TTGGCACTGCTTCGCTTACGTCATCAAGTAAATTGCTTACGAGATT	240
QY	181	TTGGCACTGCTTCGCTTACGTCATCAAGTAAATTGCTTACGAGATT	240
Db	1321	CCTGGGTTATAAGTGTGTCGCTTACGCTTACGAGTTAGCTTACGAGATT	300
QY	1321	CCTGGGTTATAAGTGTGTCGCTTACGCTTACGAGTTAGCTTACGAGATT	300
Db	1321	CCTGGGTTATAAGTGTGTCGCTTACGCTTACGAGTTAGCTTACGAGATT	300



Db	661	AAGTCCAAATGATAAAAAGACTGGGTAGTTCAATATICAACATTGCAAAATTAAGTT	720
Qy	721	CTTGGTCATTATGAAAGTATTAGTAACTCTACTGTTACCGTTACCAACG	780
Db	721	CTTGGTCATTATGAAAGTATTAGTAACTCTACTGTTACCGTTACCAACG	780
Qy	781	AAGGTAAAGCTTCAACATTAGAGAATGAGTGTACTCATGACATTACTAAATTAGT	840
Db	781	AAGGTAAAGCTTCAACATTAGAGAATGAGTGTACTCATGACATTACTAAATTAGT	840
Qy	841	AGAAAGGAGATCGTGTAGCCGCTCTGCACCTGCCAAGCTTACCGGTACTT	900
Db	841	AGAAAGGAGATCGTGTAGCCGCTCTGCACCTGCCAAGCTTACCGGTACTT	900
Qy	901	ACGACTTAAATCTGTTAGGGAGTTAGGTTATACCAAAGTTTCTAACGGCCG	960
Db	901	ACGACTTAAATCTGTTAGGGAGTTAGGTTATACCAAAGTTTCTAACGGCCG	960
Qy	961	ATTAGTACTGGTGTTACTGAAAGACTCCATTAAATTGAGTAAAGCTTCAAGGCCG	1020
Db	961	ATTAGTACTGGTGTTACTGAAAGACTCCATTAAATTGAGTAAAGCTTCAAGGCCG	1020
Qy	1021	TCTTAACTATGTGAAAGGTGACGGCCGGCTTAAGTCTGGAGACTTC	1080
Db	1021	TCTTAACTATGTGAAAGGTGACGGCCGGCTTAAGTCTGGAGACTTC	1080
Qy	1081	CAATGAGCATTCACCAAGAGTTAAATTAAACCACTCGTTCTGTATCGAGC	1140
Db	1081	CAATGAGCATTCACCAAGAGTTAAATTAAACCACTCGTTCTGTATCGAGC	1140
Qy	1141	AGAACACTAAAGGCCATGTGTTATGGTAAAGCTTCAACCCAACTCAGAAAGATGTC	1199
Db	1141	AGAACACTAAAGGCCATGTGTTATGGTAAAGCTTCAACCCAACTCAGAAAGATGTC	1199
RESULT 3			
	ABK88026	standard; DNA: 1756 BP.	
ID	ABK88026		
XX			
AC			
XX			
DE		DNA sequence encoding rtAP1 fusion protein.	
XX			
DT		07-OCT-2002 (first entry)	
XX			
rTAP1; gene; ds; Alzheimer's disease; tumour angiogenesis; malaria; nephroblastomatosis; chronic obstructive pulmonary disease; cystic fibrosis; otitis media; chronic external; HIV; psoriasis; eczema; human immunodeficiency virus; atopic dermatitis; muscular dystrophy; herpes; ulceration; sepsis; rheumatoid arthritis; periodontal disease; tumour metastasis; osteoporosis; Paget's disease; scleroderma; glomerulonephritis; hypertension.			
Homo sapiens.			
OS			
Synthetic.			
XX			
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Qy	361 GTTATTCTGTCTGAAGTTAAATTGGTGACAAATTCCTAGAAGACGTCAGAAC 420	KW tumour metastasis; tumour angiogenesis; osteoporosis; Paget's disease;
Db	361 GTTATTCTGTCTGAAGTTAAATTGGTGACAAATTCCTAGAAGACGTCAGAAC 420	KW glomerulonephritis; scleroderma; hypertension.
Qy	421 TATATCATGTAGGCTTATACCGTTAATTGGTGTACTCTGAGGAAGCTAAAGCAA 480	XX Homo sapiens.
Db	421 TATATCATGTAGGCTTATACCGTTAATTGGTGTACTCTGAGGAAGCTAAAGCAA 480	OS Synthetic.
Qy	481 TTATGATTATGTTGAGAAGGCCAGGTAAAGATGGTACCTGTAAAGAATTAG 540	XX
Db	481 TTATGATTATGTTGAGAAGGCCAGGTAAAGATGGTACCTGTAAAGAATTAG 540	OS
Qy	541 ATCGTGATCCACCGTCTCCACTGTTACTATTTTCAGGTAAGTGCGAACGTC 600	XX
Db	541 ATCGTGATCCACCGTCTCCACTGTTACTATTTTCAGGTAAGTGCGAACGTC 600	XX
Qy	601 CTTTCGAGGTTAAAGATACTGAGAGGAAAGATTTCATGTTGATCAAGTGTACTCTGTC 660	XX
Db	601 CTTTCGAGGTTAAAGATACTGAGAGGAAAGATTTCATGTTGATCAAGTGTACTCTGTC 660	XX
Qy	661 AAGTCCCATGATGAAAGACGGTAGTGTCAATTGCAATTGAAATAATTAGTT 720	XX
Db	661 AAGTCCCATGATGAAAGACGGTAGTGTCAATTGCAATTGAAATAATTAGTT 720	XX
Qy	721 CTGGGTCTTAAATGAGGTTATTAGGTTACCTGCTATTGTTTACCGACG 780	XX
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Qy	781 AAGGTAAGCCTCACATTAGAGAATGAGCTCATGACATTATTACTAAATTAGTTAG 840	XX
Db	781 AAGGTAAGCCTCACATTAGAGAATGAGCTCATGACATTATTACTAAATTAGTTAG 840	XX
Qy	841 AGAACGAGATCGTCGTCAGCTGTTCTGCACCTGAAAGTTAAAGTATCAGGGTACT 900	XX
Db	841 AGAACGAGATCGTCGTCAGCTGTTCTGCACCTGAAAGTTAAAGTATCAGGGTACT 900	XX
Qy	901 AGCACTAAATACTGTTAGGCAGTTGATTACCAAACTTTCATACGGTGCGC 960	XX
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Qy	961 ATTGAGTCGTTACTGAGAAGCTCCATTAAATTGAGTAAGCTGTCAAAAGCCG 1020	XX
Db	961 ATTGAGTCGTTACTGAGAAGCTCCATTAAATTGAGTAAGCTGTCAAAAGCCG 1020	XX
Qy	1021 TCCTAACATTGTGAAAGGGTACCGAGGCCGGCTATGTCCTGGAGCTATT 1080	XX
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Qy	1081 CAATGAGCATCCACCAAGAGTTAAATTAAACCATTCGTTTCTGATGATGAGC 1140	CC
Db	1081 CAATGAGCATCCACCAAGAGTTAAATTAAACCATTCGTTTCTGATGATGAGC 1140	CC
Qy	1141 AGAACACTAAAGGCCATTGTTATGGTAAGGTGTCAACCCAACCTCAGAAGATGTC 1199	CC
Db	1141 AGAACACTAAAGGCCATTGTTATGGTAAGGTGTCAACCCAACCTCAGAAGATGTC 1199	CC
Qy	1141 AGAACACTAAAGGCCATTGTTATGGTAAGGTGTCAACCCAACCTCAGAAGATGTC 1199	CC
Db	1141 AGAACACTAAAGGCCATTGTTATGGTAAGGTGTCAACCCAACCTCAGAAGATGTC 1199	CC
RESULT 4		CC
ID ABK8022	ABK8022 standard; DNA; 1525 BP.	CC
ID ABK8022	ABK8022; first entry	CC
XX	DNA sequence encoding SLAP1 fusion protein.	CC
XX	Yeast; alpha factor; gene; ds; Alzheimer's disease; SLAP1;	CC
KW	malaria; emphysema; asthma; chronic obstructive pulmonary disease;	CC
KW	cystic fibrosis; otitis media; otitis external; HIV; psoriasis; eczema;	CC
KW	human immunodeficiency virus; atopic dermatitis; muscular dystrophy;	CC
KW	herpes; ulceration; sepsis; rheumatoid arthritis; periodontal disease;	CC
XX	XX	XX
DE	DNA sequence encoding SLAP1 fusion protein.	XX
XX	Query Match	XX
XX	Best Local Similarity 99.7%; Pred. No. 1.6e-289;	XX
XX	Mismatches 1194; Conservative 0; Indels 4; Gaps 0;	XX
SQ	1 TCTAGGACCATGGAAAGCCCTCAAGGGACGCCGCTAAAAACCGAACCCAGTCATCACG 60	XX



is useful for inhibiting protease activity associated with a disorder such as emphysema, asthma, chronic obstructive pulmonary disease, cystic fibrosis, otitis media, otitis externa or HIV infection, or for treating an individual suffering from or at risk for a disease or disorder involving unwanted protease activity. The proteins are useful for treating dermatological diseases such as atopic dermatitis, eczema and psoriasis. In inflammatory responses to viral infection, and for treating herpes infection, corneal or epidermal ulceration, chronic non-healing wounds, sepsis, rheumatoid arthritis, periodontal disease, tumour metastasis and tumour angiogenesis, gastric ulceration, osteoporosis, Paget's disease, glomerulonephritis, scleroderma, malaria, bacterial infection, Alzheimer's disease, hypertension and muscular dystrophy. The present sequence represents the DNA encoding the TAPI fusion protein of the invention.

Query Match Sequence 1756 BP; 493 A; 395 C; 373 G; 495 T; 0 other; Score 1188.8; DB 24; Length 1756;

Best Local Similarity 99.8%; Pred. No. 8.3e-299; Mismatches 0; Indels 0; G Matches 1190; Conservative

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562	CCATGGAGACCCCTCAAGGCGACC CGCTCAAAAAACCGAACCCAGTCATCAGGCCAAG

67 ACCATCGGACTTTAATAAAATTACTCCAAATTAGCCGAATTGGCTTTCTTGTATA

742 CIGCTTCCATGTTAGTTAGCTACTAAGCCGATACCATGACCGATTTAAAGAG  
247 GTTTAACTTTAATTGTACCGAATTCAGAGGCCAAATTCACTAGGGTTCAAGAGT

802 GTTAACTTTAATTGACCGAATCCAGAGCCAAATTACGAGGTTTCAGAGT

307	TGTGGAACTTGTATCAACCTGATTCTCAATTGCAATTACTACGTGTAACGGTTTAT
862	TGTGGAACTTGTATCAACCTGATTCTCAATTGCAATTACTACGTGTAACGGTTTAT

367 TTTGCTGAAGGTAAAATGGTTGACAATTCCTAGAACGTCAAGAACTATATC

922 TTTTGCTGAAGGTTAAAATGGTGCACAAATTCTAGAGACGTAGAAACTATATC  
 427 ATAGTAGGCCCTTTACCGTTAAATTGGTGACTGTAGAAACTATATC

982 ATAGTGGCTTTACCGTTAATTGGTGATACTGAGGAAGCTAAAAGCAAATTAATG

		ATTATGTTGAAAGGCCACCCAGGTAAGATGTTGACCTAGTTAAGAATAGTCGTG
487		
1042		ATTATGTTGAAAGGCCACCCAGGTAAGATGTTGACCTAGTTAAGAATAGTCGTG

607 ACCGGGGGAGCTTGTGAACTATTTCAAGGGTAAGTGGGAACGTCCTTTCG  
1102 ATACCCCTCTTGCACTTAGTTAACATAATTTC

001 AGGTTAAAGATTACTGGAAAGGAATTTCATGTTGATCAAGTTACTGTCAAAGTC  
1162

1222	CAATGATGAAAAAGACTGGGTATGTCAAATTCAACATTGCAAAAAAATTAAAGTCTTGGG
1227	TCTTATTAAATGAGTATTAGGTAACTGGCTACTGCTATTTTTTACAGAGCAGAGGTA

1282 TCTTAAATGAAGTATTAGGTAAACGCTACTGCTATTTCACAGACGAAAGGTA

	ABK88015		ABK88015 standard; DNA; 1182 BP.		
	ID	Key	Location/Qualifiers	Value	
QY	484	ATGATTATGTTGAGAAAGGCCACGGTAAAGTCATCGCTTGTACATGTTGACCTAGTTAACATAATAGATC	543		
Db	865	ATCATATTGTTGAGAAAGGCCACGGTAAAGTCATCGCTTGTACATGTTGACCTAGTTAACATAATAGATC	924		
QY	544	GTTGATACCGTCTCCGACTAGTTAATCTATATTTTCAAGGGTAAGTGGGAAACGTCCTT	603		
Db	925	GTTGATACCGTCTCCGACTAGTTAATCTATATTTTCAAGGGTAAGTGGGAAACGTCCTT	984		
QY	604	TGGAGGTTAAAGATACTTGAGAAGGAATTTCATGTTGATCAAGTACTACTGTAAGAG	663		
Db	985	TCCAGGTAAAGATACTTGAGAAGGAATTTCATGTTGATCAAGTACTACTGTAAGAG	104		
QY	664	TTCCAAATGATGAAAGACTGGGTATGTTCAATAATCACATGCAAAAAATTAAAGTGTCTT	723		
Db	1045	TTCCAAATGATGAAAGACTGGGTATGTTCAATAATCACATGCAAAAAATTAAAGTGTCTT	110		
QY	724	GGCTCTTAAATGAACTTAAAGCTTAAAGTAGTAAAGGAACTGTTGATCAAGTACTACTGTAAGAG	783		
Db	1105	GGCTCTTAAATGAACTTAAAGTAGTAAAGGAACTGTTGATCAAGTACTACTGTAAGAG	116		
QY	784	GTAAGCTTCAACATTAGAAATGAGTGAAGTGTACATGACATTACTAAATTTTAGAGA	843		
Db	1165	GTAAGCTTCAACATTAGAAATGAGTGAAGTGTACATGACATTACTAAATTTTAGAGA	122		
QY	844	ACGGAGATCGCTGTAGCGCTTCTGTGACCTGCCCAGTTAAGTTACCTCGGTACTACG	903		
Db	1225	ACGGAGATCGCTGTAGCGCTTCTGTGACCTGCCCAGTTAAGTTACCTCGGTACTACG	128		
QY	904	ACTAAAAAACTGTTTTAGGCCAGTTAGGTATTACCAAGTTTCTAACGGTGGCCGATT	963		
Db	1285	ACTAAAAAACTGTTTTAGGCCAGTTAGGTATTACCAAGTTTCTAACGGTGGCCGATT	134		
QY	964	TGATGTTGTTACTGAAAGCTCATTAAAATTGAGTAAGCTTCAAAACGCCGCT	102		
Db	1345	TGATGTTGTTACTGAAAGCTCATTAAAATTGAGTAAGCTTCAAAACGCCGCT	140		
QY	1024	TAACATTGTTGAAAGGGTACCGAGGGCCGCTATGTTCTGGAAAGCTTATTCCAA	108		
Db	1405	TAACATTGTTGAAAGGGTACCGAGGGCCGCTATGTTCTGGAAAGCTTATTCCAA	146		
QY	1084	TGAGCATTCACCAAGAGTTAAATTAAACATTGTTCTGTATGTCAGGAGCACA	114		
Db	1465	TGAGCATTCACCAAGAGTTAAATTAAACATTGTTCTGTATGTCAGGAGCACA	152		
QY	1144	ACACTAAAAAGCCATGTTATGGGTAAAGTTGTCAACCGAACCTCGAGAATGTC	1198		
Db	1525	ACACTAAAAAGCCATGTTATGGGTAAAGTTGTCAACCGAACCTCGAGAATGTC	1579		
<b>RESULT 7</b>					
	ABK88015		Alpha-1-antitrypsin (AAT) protein.		
	ID		Alpha-1-antitrypsin; ds; protease inhibitor; malar emphysema; asthma; chronic obstructive pulmonary disease; eczema; cystic fibrosis; otitis media; otitis externa; HIV; psoriasis; human immunodeficiency virus; atopic dermatitis; muscular dystrophy; herpes; ulceration; sepsis; rheumatoid arthritis; periodontal disease; tumour metastasis; tumour angiogenesis; osteoporosis; Page's disease; glomerulonephritis; scleroderma; Alzheimer's disease; hypertension.		
	XX				
	AC				
	XX				
	DT		07-OCT-2002 (first entry)		
	XX				
	DE		DNA encoding human alpha-1-antitrypsin (AAT) protein.		
	XX				
	KW				
	XX				
	OS		Homo sapiens.		
	XX				
	FH				
	FT				
	Key				
	CDS				
	XX				

```

FT /*tag*/ a
FT product= "Alpha-1-antitrypsin"
FT /partial=
FT /note= "No start or stop codon shown"
XX WO200250287-A2.
XX
XX PD 27-JUN-2002.
XX PF 18-DEC-2001; 2001WO-US49256.
XX PR 18-DEC-2000; 2000US-256699P.
XX PR 20-NOV-2001; 2001US-331966P.
XX PA (ARRI-) ARRIVA PHARM INC.
XX PI Barr PJ, Gibson HL, Pemberton P;
XX DR WPI: 2002-5000631/53.
XX DR P-PSDB; AAU998873.
XX
XX Novel fusion protein useful for inhibiting protease activity associated
PT with a disorder such as emphysema, asthma, comprises a first protease
PT inhibitor comprising alpha 1-antitrypsin and a second protease
PT inhibitor -
XX Disclosure; Page 24-25; 134PP; English.
XX
CC This invention relates to a novel fusion protein comprising a first
CC protease inhibitor comprising an alpha 1-antitrypsin or its functionally
CC active portion and a second protease inhibitor or its functionally
CC active protein. The fusion proteins of the invention may act as an
CC inhibitor of protease activity. The fusion protein of the invention
CC is useful for inhibiting protease activity associated with a disorder
CC such as emphysema, asthma, chronic obstructive pulmonary disease,
CC cystic fibrosis, otitis media, otitis external or HIV infection, or
CC for treating an individual suffering from or at risk for a disease or
CC disorder involving unwanted protease activity. The proteins are useful
CC for treating dermatological diseases such as atopic dermatitis, eczema
CC and psoriasis, in inflammatory responses to viral infection, and for
CC treating herpes infection, corneal or epidermal ulceration, chronic
CC non-healing wounds, sepsis, rheumatoid arthritis, periodontal disease,
CC tumour metastasis and tumour angiogenesis, gastric ulceration, disease,
CC osteoporosis, Paget's disease, glomerulonephritis, scleroderma, malaria,
CC bacterial infection, Alzheimer's disease, hypertension and muscular
CC dystrophy. The present sequence represents the DNA encoding the human
CC alpha-1-antitrypsin (AT) protein used to create the fusion protein
CC of the invention.
XX Sequence 1182 BP; 369 A; 214 C; 229 G; 370 T; 0 other;
SQ Query Match 77.5%; Score 1182; DB 24; Length 1182;
Best Local Similarity 100.0%; Pred. No. 3.7e-287;
Matches 1182; Conservative 0; Mismatches 0; Indels 0; Gaps 0
Qy 12 GAAGACCTCAAGGCGCCGCTCAAAAACGGACACAGTCATCAGCCAAGACCAT 71
Db 1 GAAGACCTCAAGGCGCCGCTCAAAAACGGACACAGTCATCAGCCAAGACCAT 60
Qy 72 CGGACTTTAAATAATTACTCAAATTCTTGTACTAACATTTTAGTCCTGTTCTATGCCACTGCT 131
Db 61 CGGACTTTAAATTACTCAAATTCTTGTACTAACATTTTAGTCCTGTTCTATGCCACTGCT 120
Qy 132 TTAGCTCATCAAAGTAAATTCTPACTAACATTTTAGTCCTGTTCTATGCCACTGCT 191
Db 121 TTAGCTCATCAAAGTAAATTCTPACTAACATTTTAGTCCTGTTCTATGCCACTGCT 180
Qy 192 TTGCGCTATGTTGAGTTAGGTACTAAGCCGATACCCATGAGGATTAGAAGGTTTA 251
Db 181 TTGCGCTATGTTGAGTTAGGTACTAAGCCGATACCCATGAGGATTAGAAGGTTTA 240
Qy 252 AACTTTAAATTGACCGAAATCCAGAGGCCAAATTCAGAGGGTTCAAGAGTTGTTAGAAGGTTTA 311

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Db	241	AACTTTAATTGACCGAAATCCCAGAACGCCAATTCAGGGTTTCAAGAGTGTGTTG	300
Qy	312	AGAACTTGATCAACCTGATTCTCAATTGCAATTAACTACTGGTAACGGTTATTATTTTG	371
Db	301	AGAACTTGATCAACCTGATTCTCAATTGCAATTAACTACTGGTAACGGTTATTATTTTG	360
Qy	372	TCTGAAGGTTAAATTGGTTGACAAATTCTAGAACAGCTCAAGAAACTATATCATAGT	431
Db	361	TCTGAAGGTTAAATTGGTTGACAAATTCTAGAACAGCTCAAGAAACTATATCATAGT	420
Qy	432	GAGGTTTACCGTTAATTGGTGTACTGAGGAAGTAAAGCAAAATTAAATGATTAT	491
Db	421	GAGGTTTACCGTTAATTGGTGTACTGAGGAAGTAAAGCAAAATTAAATGATTAT	480
Qy	492	GTTGAGAAAGCCACCCAGGTAAGATCCTTGACTTAGTAAAGAATTAGATCGTGATACC	551
Db	481	GTTGAGAAAGCCACCCAGGTAAGATCCTTGACTTAGTAAAGAATTAGATCGTGATACC	540
Qy	552	GTCTTCGCACTAGTTAACTATATTTCAGGTTAAGTGGGAAGCTCTTCGAGGTT	611
Db	541	GTCTTCGCACTAGTTAACTATATTTCAGGTTAAGTGGGAAGCTCTTCGAGGTT	600
Qy	612	AAAGATACTGAAGGAAAGATTTCACTGTTGATCAAGTTACTGTCAAAGTCCAAATG	671
Db	601	AAAGATACTGAAGGAAAGATTTCACTGTTGATCAAGTTACTGTCAAAGTCCAAATG	660
Qy	672	ATGAAAAGACTGGGTATGTTCAATTTCACATTCAACATTGCAAAAAATTAACTTCTGGCTTAA	731
Db	661	ATGAAAAGACTGGGTATGTTCAATTTCACATTCAACATTGCAAAAAATTAACTTCTGGCTTAA	720
Qy	732	TTATGAACTTAAAGGTAACTGCTTAACTTTTACAGAGAAGGTAAAGCT	791
Db	721	TTATGAACTTAAAGGTAACTGCTTAACTTTTACAGAGAAGGTAAAGCT	780
Qy	792	CAACATTAGAGAACTGAGTTGACTCATGACATTAACTAAATTAGAACAGGAGAT	851
Db	781	CAACATTAGAGAACTGAGTTGACTCATGACATTAACTAAATTAGAACAGGAGAT	840
Qy	852	CGTCTAGGGCTCTCTGCACCTGGCCAAGTTAAAGTATCACGGTACTTAACTTAAA	911
Db	841	CGTCTAGGGCTCTCTGCACCTGGCCAAGTTAAAGTATCACGGTACTTAACTTAAA	900
Qy	912	TCTGTTTAGGCCAGTTAGGTATTACCAAGTTTCTAACGGTGCGATTGTGTTG	971
Db	901	TCTGTTTAGGCCAGTTAGGTATTACCAAGTTTCTAACGGTGCGATTGTGTTG	960
Qy	972	GTTACTGAAAGAAGCTCCATTAAATTGGTAAAGCTGTTCACAAAGCCGTTAACTATT	1031
Db	961	GTTACTGAAAGGTCCTTAAATTGGTAAAGCTGTTCACAAAGCCGTTAACTATT	1024
Qy	1032	GATGAAAAGGGTACCGAGCGCCCTATGTTCTGGAAAGCTATTCCAAATGACGATT	1093
Db	1021	GATGAAAAGGGTACCGAGCGCCCTATGTTCTGGAAAGCTATTCCAAATGACGATT	1084
Qy	1092	CCACCGAAGTTAAATTAAACCATTCGTTTCTGATGATGCCAGAACACTAA	1154
Db	1081	CCACCGAAGTTAAATTAAACCATTCGTTTCTGATGATGCCAGAACACTAA	1144
Qy	1152	AGCCCATTTGGTAAAGGTGTCAACCCAACTCGAGAAG	1193
Db	1141	AGCCCATTTGGTAAAGGTGTCAACCCAACTCGAGAAG	1182

KW Protein expression; monocotyledon plant cell;  
KW glycosylated alpha 1-antitrypsin; AT; glycosylated antithrombin III;  
KW ATIII; human serum albumin; HSA; subtilisin BPN'; treatment; emphysema;  
XX antithrombotic; blood replacement; ss.

Synthetic.

Homo sapiens .

FH Key

XX misc\_feature

FT FT

/tag= a

/note= "codon-optimised Ramy3D signal sequence"

XX misc\_feature

FT FT

/tag= b

/note= "encodes mature ATAT"

XX XX

PN WO9836085-A1 .

XX XX

PD 20-AUG-1998 .

PF 13-FEB-1998;

98WO-US03068 .

XX XX

PR 13-FEB-1997;

97US-0038170 .

PR 13-FEB-1997;

97US-0037991 .

PR 13-FEB-1997;

97US-0038168 .

PR 13-FEB-1997;

97US-0038169 .

XX XX

PA (PHYT-) APPLIED PHYTOLICS INC .

XX XX

PI Rodriguez RL, Sutliff TD;

XX XX

DR WPI; 1998-467179/40 .

XX XX

PT Expressing mature, glycosylated proteins in monocotyledonous plant

PT cells - from chimeric gene including signal peptide sequence,

PT specifically therapeutic agents and industrial enzymes

XX PS Disclosure; Pages 34 iii-iv; 53pp; English.

XX

The present sequence encodes a fusion protein of codon optimised Ramy3D signal sequence/mature alpha1-antitrypsin (AT). The protein is used to exemplify the invention. The specification describes a method for producing mature heterologous protein in monocotyledonous plant cells.

The method comprises transforming the cells with a chimeric gene comprising a monocotyledon transcript regulator, inducible either during seed maturation or by adding/removing a small molecule, DNA encoding the heterologous protein, and DNA encoding a signal peptide, with the signal peptide causing secretion of the protein from the cell. Proteins expressed in this manner include mature glycosylated alpha 1-antitrypsin (AT) with a glycosylation pattern that significantly increases its serum half-life, mature glycosylated antithrombin III (ATIII), mature human serum albumin (HSA) having the native folding pattern as shown by bilirubin-binding characteristics, or mature active subtilisin BPN'. These proteins are useful therapeutically (e.g. AT for treating emphysema, ATIII as antithrombotic and HSA as blood replacement) or as industrial enzymes (BPN' is used in detergents).

XX SQ Sequence 1260 BP; 287 A; 428 C; 350 G; 195 T; 0 other;

CC

ID	AAQ89254 standard; cDNA; 1312 BP.		
XX			
AC	AAQ89254;		
XX			
DT	18-OCT-1995 (first entry)		
XX	Human alpha-1-trypsin cDNA.		
DE	Alpha-1-trypsin; protease-inhibitor; ss.		
XX			
KW			
XX			
OS	Homo sapiens.		
FH			
Key			
CDS			
FT	Location/Qualifiers		
FT	28..158		
FT	/*tag- a		
FT	28..99		
FT	/*tag- b		
FT	mat_peptide		
FT	100..1255		
FT	/*tag- c		
XX			
PN	US5399684-A.		
XX			
PD	21-MAR-1995.		
XX			
PF	20-MAY-1982; 82US-0380310.		
XX			
PR	20-MAY-1982; 82US-0380310.		
PR	07-FEB-1984; 84US-0638980.		
PR	07-US-0022543.		
PR	15-DEC-1987; 87US-0133190.		
PR	16-SEP-1988; 88US-0246912.		
PR	22-AUG-1989; 89US-0398288.		
PR	11-MAR-1991; 91US-0666450.		
PR	18-NOV-1992; 92US-0979556.		
PR	02-JUL-1993; 93US-0086442.		
XX	(WASH-) WASHINGTON RES FOUND.		
PI	Devie EW, Kurachi K, Thirumalachary C, Woo SLC;		
XX			
WP:	1995-130740/17.		
DR	P PSDB; AAR71969.		
XX			
PT	Human alpha1-antitrypsin (alpha1-AT) cDNA sequence - can be used for the expression of alpha1-AT		
PT	Claim 1; Fig.1; 15pp; English.		
XX			
CC	The sequence of a human alpha-1-antitrypsin cDNA clone is given in AAQ89254. Expression of the cDNA in host cell transformants has allowed production of recombinant alpha-1-antitrypsin.		
CC			
XX			
SQ	Sequence 1312 BP; 339 A; 368 C; 324 G; 281 T; 0 other;		
Best Local Similarity	60.4%; Pred. No. 1.1e-98;		
Matches	713; Conservative 0; Mismatches 468; Indels 0; Gaps 0;		
Query Match	28..38; Score 432.2; DB 16; Length 1312;		
DB	GAGAACCCCTAAGGGCACGCCGCTAAAAAACCGCACCAAGTCACTACGACCAAGACCAT 71		
DB	100 GAGGATCCCCGGGAGATGGTGCAGAACAGATACTCCACCATGAGGTACAGTCAC 159		
Qy	72 CGGACTTTTAAATAAATTACTCCAAAATTAGCCGAATTAGCTTTCTTGTTATAGACAA 131		
Db	160 CCAACCTTCACAAAGTCAACGCCAACAAATCCTACGCCACTACGCC 219		
Qy	132 TTAGCTCATCAAAGTAACTTACTAACATTAGCTTTCTTGTTATAGACAACTGAG 191		
Db	220 CTGGCACACCAAGTCCAACGCCAACAAATCCTACGCCACTACGCC 279		
Qy	192 TTGGCCATGTTGAGTTAGGTACTAAAGCCGATAACCATGACGGAGATTAGAAGGTTTA 251		
Db	280 TTGGCAATGCTCTCCCTGGGACCAAGGTGACACTCACGATGAATCTGGGGCTG 339		
RESULT	10		
AAV28471			
ID	AAY28471 standard; cDNA; 1312 BP.		
XX			
AC			
XX			
DT	21-AUG-1998 (first entry)		

X	Nucleotide sequence of the alpha-1-antitrypsin.		
E			
X	Human alpha-1-antitrypsin; ATR-1; antibody; ATR-1 deficiency; ss		
W			
X			
X	Homo sapiens.		
S			
X	Key		
	Location/Qualifiers		
	28..1257		
	*	tag=	a
	/product= "alpha-1-antitrypsin"		
T			
T			
T			
T			

N	US5136379-A.
X	X
D	07 -APR-1998.
X	07 -JUN-1995;
X	95US-0479545.
R	20 -MAY-1992;
R	82US-0389310.
R	07 -FB2B-1984;
R	84US-0639980.
R	03 -MAR-1987;
R	87US-002243.
R	15 -DEC-1987;
R	87US-0133190.
R	16 -SEP-1988;
R	88US-0246512.
R	22 -AUG-1989;
R	89US-0398388.
R	11 -MAR-1991;
R	91US-0666550.
R	18 -NOV-1992;
R	92US-0979556.
R	02 -JUL-1993;
R	93US-0086442.
R	12 -DEC-1994;
R	94US-0361659.
X	ATTACHMENT BES FOUND

(WASH ) WASHINGTON KIDS FUND.  
 Davie EW, Kurachi K, Thirumalachary C, Woo SLC;  
 WPI; 1998-239214/21.  
 P-PSDB; AAW56709.

DNA encoding alpha-1 anti-trypsin - useful for, e.g. producing recombinant alpha-1 anti-trypsin

This is the nucleotide sequence encoding the novel human alpha-1-antitrypsin (ATR-1) protein. Its products are useful for diagnostic and therapeutic purposes. The invention also relates to recombinant forms which can be used to prepare antibodies.

producing recombinant ATR-1 polypeptides having variants in the blood, as ligands in assays for detecting ATR-1 variants in the blood, as ligands in assays for ATR-1, and to treat ATR-1 deficiency.

Query	Match	Score	DB	Length
Sequence 1312	BP;	339	A;	324 G;
SQ		368	C;	281 T;
		324	G;	0 other;
Query Match		432	DB	19;
Query-Subsequence similarity		38	DB	19;
		60	DB	19;
		43	DB	19;
		60	Dred	No
		1	DB	1
		98		

```

29 12 GAAGACCCCTCAAGGGAGGCCGCTCAAAAAACGACACCGTCATAGACCAAGACCAT 71
    Bes Loca Subj. ID Conservativ. 0; Mismatches 468; Indels 0; Gaps
    Matches 713; Conservative 0;

```

Pos	Sequence	Score
72	CCGACGTTTAAATTAATCTTCAAAATTAGCGGAATTGGCFUTTTCTTGATGACAA	131
100	GAGGATCCCCAGGAGATGCTGCCAGAGAGACAGATAATCCCACATGAGGATC	159
-	-	159

160 CCAACCTCTAACAGATACTCCCAACTTGGCTGAGTTGCGCTTCAGGCTATACGCCAG 219

2y	132	TAGCTTCAAGTAATCCTACATTCATGTTAGCTTGATGACAT	121
dbb	220	CTGGCACACCAGTCCAAAGCACCATATCTCTCCCCAGTAGCTACAGGCC	279

QY	192	TTCGCCATGTTGAGTACTAAACGCAATTAGCAGATTATAGAGTTTA	251
Ddb	280	TTCGCCATGCTCGGGCCAAGGCTGACATCAGATGAAATCTGGGGCTTG	339

QY	252	AACTTAATTGACCGAAATCCAGAAGCCAAATTCAGAGGTTCAGAGTGTG	311
QY	340	AATTCTAACCTCTACGGAGATTCCGGAGGTCTACGATCCATGAAGGTT	399
QY			

312	AGAACTTGAATCAACCTGATTCTCAATTGGAATTAACCTACTGGTAACGGTTTATTTTTG	371
QY		
Db	4 00 CGTACCTCAACCGCCAGAAGCCAGTCAGCTCCAGCTTACCCACGCCATTGGCTCTGCCTC	459
QY	372 TCTGAAAGTTAAAATTGGTGTACAATTCTTAGAACGCTCAAGAAACTATATCATAGT	431
Db	4 60 AGCGGCCGCTGAAGCTAGTGATAAGTTGGAGATGTTAACAGTGTACCACTCA	519
QY	432 GAGCTTTACCGTTAATTGGTGTAACTGAGCTTAAAGGAAATTAAATGATTAT	491
Db	520 GAAGCCCTCACGTCAACTTCGGACACCGAGGCCAAAGAACAGATCAACGATTAC	579
QY	492 GTTGGAAAGGCCAGGTAGATGTTGACCTTAAGAATTAGATCTGTGATACC	551
Db	580 GTGGAAAGGGTACTCAAGGAAATTGTGGATTCTANGGCTTACAGAGACACA	639
QY	552 GTCCTCGACTTAAGTAACTATATTTCACAGGTAAAGTGGAACTGTCAGGTT	611
Db	640 GTTTTGCTGTGGATTACATCTCTTTAAGGCAAATGGGAGAACCTTGAAGTC	699
QY	612 AAGGAACTGAAAGGAAATTTCATGTTGATCAAGTTACTACTGTCAAAGTTC	671
Db	700 AAGGACACCGGAAAGGAACTCACCTGGACCGTGGACCTGTGACCTPATG	759
QY	672 ATGAAAAGCTGGGTATGTTCAATTTCACATTGCAAAATTAAATTAGTTCTGGGCTTA	731
Db	760 ATGAAAGCTTGTAGCATGTTAACATCCAGATTAACTCCAGATTGTAAAGC	819
QY	732 TTATGAACTATTAGGTAAACGCTACTGTTTACCAAGCAGAACTTAAAGCT	791
Db	820 CTGTGAAATACCTGGGAATGCCACCCAACTCTCTCTGTGAGGGAAACTA	879
QY	792 CAACTTAAAGAAATGAACTGACTCATGACATTAACTAAATTAGAGANCAGGAT	851
Db	880 CAGCACCTGGAAATGAACTCACCACGATATCACCAAGTTCTGGAAAATGAAGAC	939
QY	852 CGTCGTAGGCCTCTCTGCACCTCCAAAGTTAGTATCACCGGTACTAACGCTTAA	911
Db	940 AGAAAGTCNGCAGCTTACATTGCCCCAAACTGTCCATTACTGGAACTATGCTGAG	999
QY	912 TCTGTTTACGGCAGTTAGTATACCAAGTTTTCACGGTGGGATTGAGTGGT	971
Db	1000 AGCGTCCCTAGGTCAACTGGCATACTAACGTTGACCTCTCCCGG	105
QY	972 GTTACTGAAAGGCTCCATTAAATTGAGTAAACCTGTTCAACAGGCTCTTAACATT	103
Db	1060 GTCACAGGGGACCCCTGAAAGCTCTCAAGGGCTGCAATGGCTGCGACCATC	117
QY	1032 GATGAAAAGGGTACGGCCGGCTATGTTCCTGGAAAGCTTCAATGAGCAT	109
Db	1120 GACGAGAAAGGTCAAGGTGGCCATTGTTTACGGCCATACCCATGCTCAT	117
QY	1092 CCACAGAAAGTTAAATTAAATACCATTCGTTTCTGATGATCGAGGAGAACACTAA	115
Db	1180 CGCCCGAGSTCAAGTCAACAAACCTTGTCTCTTATGATGAACAAAAATACCAG	123
QY	1152 AGCCATTGTTAGTGGTAACTGGTAACTGTTCAACCCAACTCAGAA	1192
Db	1240 TCTCCCTCTCTCATGGAAAAGGTGAATCCCACCCAAAA	1280

XX	Homo sapiens.
OS	
XX	
US5025161-A.	
PN	
XX	
15-FEB-2000.	
PD	
XXX	20-JAN-1998; 98US-0009581.
PF	
XX	07-JUN-1995; 95US-0479545.
PR	
XX	07-MAY-1982; 82US-030810.
PR	
XX	07-MAY-1984; 84US-068980.
PR	
XX	03-MAR-1987; 87US-002543.
PR	
XX	15-DEC-1987; 87US-0133190.
PR	
XX	16-SEP-1988; 88US-0246912.
PR	
XX	22-AUG-1989; 89US-038288.
PR	
XX	11-MAR-1991; 91US-066450.
PR	
XX	18-NOV-1992; 92US-097556.
PR	
XX	02-JUL-1993; 93US-0086442.
PA	
PA	(WASH-) WASHINGTON RES FOUND.
PI	
PI	Woo SLC, Thirumalachary C, Kurachi K, Davie EW;
DR	
DR	WPI; 2000-181811/16.
PR	
PR	P-PSDB; AAY78890.
XX	
PR	Preparing alpha <sub>1</sub> -antitrypsin for inhibiting neutrophil elastase
PR	involves transfecting host cell with vector comprising
PR	alpha <sub>1</sub> -antitrypsin DNA sequence that hybridizes to human
PR	alpha <sub>1</sub> -antitrypsin cDNA, or its complement -
ES	
ES	Claim 1: Fig 1: 16pp; English.
XX	
CC	This sequence represents the human alpha <sub>1</sub> -antitrypsin nucleotide
CC	sequence. Alpha <sub>1</sub> -antitrypsin is an important protease inhibitor, the
CC	major function of which is to inhibit neutrophil elastase. Low levels of
CC	alpha <sub>1</sub> -antitrypsin in the blood are associated with chronic obstructive
CC	pulmonary emphysema and infantile liver cirrhosis. A vector comprising a
CC	mammalian alpha <sub>1</sub> -antitrypsin DNA sequence that hybridises to human
CC	alpha <sub>1</sub> -antitrypsin cDNA can be introduced into a host cell in a method
CC	for the production of alpha <sub>1</sub> -antitrypsin.
XX	
XX	Sequence 1312 BP; 339 A; 368 C; 324 G; 281 T; 0 other;
XX	
XX	Query Match 28.3%; Score 432.2; DB 21; Length 1312;
XX	Best Local Similarity 60.4%; Pred. No. 1..1e-98;
XX	Matches 713; Conservative 0; Misaligned 458; Indels 0; Gaps 0
Y	
Y	1.2 GAAGACCTCAAGGGACGGCTCAAAAACCGACACAGCTCATCACGACCAAGACCAT 71
b	1.0 GAGGTATCCCAGGGAGATGCTGCCAGAAGCAGATACTCCACATGAGTCAGGATCAC 159
Y	
Y	7.2 CGGACTTTAAATTACTCCAAATTGCGGAATTGCTTCTTGTTCTATAGACAA 131
b	1.60 CCAAACCTTCACAAGATCACCCCCAACATGGCTGACTTCGGCTTCAGCCPATACCGCAG 219
Y	
Y	13.2 TTAGCTCATCAAAGTAAATCTACTACATTTTTAGTCCTGTTCTATTGCCACTGCT 191
b	2.20 CTGGACACCAAGCTTCAACAGCACCAATAATTCCTCCCAAGTAGCATGCCTACGCC 279
Y	
Y	19.2 TTGCGCATGTTGAGTTAGGGTACTAACGGGATACCCATGAGATTGTAAGAGTTTA 251
b	2.80 TTGCAATGCTCTCTGGGACCAAGGTGACATCAACATGAAATCTCTGGAGGCCCTG 339
Y	
Y	25.2 AACCTTAATTGACCGAAATCCAGAAAGCCAAATTGACAGGGTTTCAATGAACTGGTAACCGTTTATTTTG 371
b	3.40 AAATCAACCTCACGGAGTTCCGGAGCTCAGATCCAGAAAGGTTCCAGGAACTCCCTC 399
Y	
Y	31.2 AGAACTTGAATCACCTGATTCAATGAAATTAACTACTGGTAACCGTTTATTTTG 371
b	4.00 CGTRACCCCTAACGCCAACAGCCAAACAGCAGCTGACAGCAGCTGACAGCCAAATGGCTTC 459

severe combined immunodeficiency; SCID; autoimmune disorder; allergy;  
multiple sclerosis; rheumatoid arthritis; diabetes mellitus; asthma;  
fertility; pain; antigen; ss.

Homo sapiens.

WO200166689-A2.

13-SEP-2001.

05-MAR-2001; 2001WO-US04942.

07-MAR-2000; 2000US-0519705.  
19-MAY-2000; 2000US-057444.  
17-JUN-2000; 2000US-0596193.  
14-JUL-2000; 2000US-0616847.  
19-SEP-2000; 2000US-0665363.  
20-OCT-2000; 2000US-0693267.

(HYSE-) HYSEQ INC.

Tang YT, Liu C, Asundi V, Xu C, Wehrman T, Ren F, Ma Y, Zhou P,  
Zhao QA, Yang Y, Drmanac RT, Zhang J, Chen R, Xue AJ, Wang J;  
WPI; 2001-589934/66.  
P-ESDB; AAU8152.

Novel polypeptides and nucleic acids obtained from cDNA libraries  
prepared from various human tissues, for diagnosis and treatment of  
cancer, neurological, inflammatory, and autoimmune disorders -

The invention relates to novel isolated human secreted polypeptides (I) and polynucleotides (II). (I) and (II) are useful for treating inflammatory conditions such as arthritis, nephritis, Crohn's disease, ischaemia-reperfusion injury, shock, sepsis, immune responses, and is involved in increasing haemopoiesis, stem cell survival, bone growth and remodeling. (I), (III) and modulators of (II) are useful for prophylaxis or treatment of one or more cancers. (III) is also useful for creating transgenic animals useful for studying the *in vivo* activities of the polypeptide as well as for studying modulators of the polypeptides (I) induces the proliferation of neural cells and regeneration of nerve and brain tissue and is useful for the treatment of central and peripheral nervous system diseases and neuropathies, such as Alzheimer's disease, Huntington's disease, and amyotrophic lateral sclerosis. In addition, (I) is involved in hematocytic or chemokinetic activity, regulation of haemopoiesis and is useful for treating myeloid or lymphoid cell disorders, platelet disorders such as thrombocytopoenia and for regeneration of bone, cartilage, tendon, ligament and/or nerve tissue growth, and in tissue repair, healing of burns, incisions, ulcers, for treating osteoporosis, osteoarthritis, bone degenerative disorders, or periodontal disease. Furthermore, (I) is also useful for gut protection or regeneration and treatment of lung or liver fibrosis reperfusion injury in various tissues, various immune deficiencies and disorders including severe combined immunodeficiency (SCID), bacterial infections, autoimmune disorders e.g. multiple sclerosis, fungal infections, rheumatoid arthritis, diabetes mellitus, myasthenia gravis, allergic reactions and conditions, such as asthma or other respiratory problems. In addition, (I) affects biorhythms or circadian cycles of rhythms, fertility, metabolism, catabolism, anabolism, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, provide analgesic effects or other pain reducing effects, immunoglobulin like activity and can act as an antigen in a vaccine composition to raise a immune response. **SEQ ID NO 133; 107PP; English.**

Query	Match	Score	Length
Best Local Matches	Simililarity	429.2;	1367;
718:	Conservative	DB 22;	
		Pred. No. 6.6e-48;	
		0: Mismatches 463;	
		Indels 1;	
		Gaps 1	

12	GAAGGCCCTCAAGGCACGGCGCTCAAACCGAACCCGATCAGCAGCAAGACCAT	71
94		
Db	105 GAGGTACCCCCAGGGAGATGTCGCCAGAAGCAGAACATCCACCATGAGATCAC	164
Qy	72 CGCAGCTTTAAATAAAATTACTCCAAATTAGCGAAATTGCTTTCCTTGTATAGCAA	131
Db	165 CCAACCTCAAAAGAACCCCAACCTGGCTGAGTCGCCCTATACGCCAG	224
Qy	132 TTAGCTCATCAAAGTAATTCTACTAACATTTTTATTGCTCTTCTATGCCACTGCT	191
Db	225 CTGGCACACCAAGTCACAGCACCAATATCCTCTCAGGATCCCTACAGCC	284
Qy	192 TTGCGCATGTGAGTTAGGTTAGGTTACTAAAGCCGATAACCCATGAGGAGATTAGGGT	251
Db	285 TTTGCAATGCTCCCTGGGACCAAGGCTGACATCACGATGAATCTGGGGCTG	344
Qy	252 AACTTTAATTGACGMAATCCAGAACCCAAATTACAGGAGTTTCAGGGTTCTCAAGAGTTGTT	311
Db	345 ATTTCACCTTCACGGGATTCGGAGCTCAGATCCATGAGGCTCCAGGAATCTCTC	404
Qy	312 AGAACTTTGAATCAACCTGATTCTCAATTGCAATTAACTACGGTAACGGTTATTTTG	371
Db	405 CGTACCCCTAACAGGCAAGCAGAACGGCTCCAGGTGACCCAGCGAACGGCAATGGCTC	464
Qy	372 TCTGAGGTTAAAATGGTTGACAATTCTGAACTGAGCTCAAGAAACTATATAGT	431
Db	465 AGCAGGGCCCTAAAGCTAGTGGATAAGTTTGGAGGTAAATGTTGACACTCA	524
Qy	432 GAGGCTTTACGGTTAATTGGTGT ACTGAGGAAGCTAAAGCCAAATTATGATTAA	496
Db	525 GAAGCCCTACGTCAACTTGGGATCACCGAGAACAGATCACGRTTA	584
Qy	491 TGTGAGAAAGCCACCCAGGGTAAGATCCTGAOCTAGTTAACGAAATTAGATCTGTGATAC	555
Db	585 CGTGGAGAAAGGTACTCAAGGGAAAATTGGATTGCTTGTGAGCTGACAGACAC	644
Qy	551 CGNCCTCCACAGTTAACATATTTCAGGGTAGTGGGAAGCTCCCTTGAGGT	610
Db	645 AGTTTGTCTGGTAATTGACATCTCCTTAAAGGCAAATGGAGACCTTGTGAGT	704
Qy	611 TAAAGATGACTGAGAGGAGATTTCATGTTGACAAAGTTCTACTGTTAACGTTCAAAT	671
Db	705 CAGGACACGGAGGAGGACTCAGCTTGTGAGGAGGAGGAGGAACTTGTGAT	764
Qy	671 GATGAAAGACTGGTACGTTCAATTAAACATTGCAAAATTAAAGTTCTGGCTFT	731
Db	765 GATGAAAGCTTGGCAAGTGTACATCCAGCACTGTGAGGTGTCAGCTGGTACT	824
Qy	731 ATTAATGAGATTATTAGGTAAACGCTACTGCTATTTCCTTACCGACGAAGTAAAGCT	791
Db	825 GCTATGAAATACCTGGGAAATGCCACCCCATCTCTCCTGAGGGAAACT	884
Qy	791 TCACACATTAGGATGAGTTGACTCATGACATTATTACTAAATTAGAACAGGAGGA	857
Db	885 ACACACCTGGAAATGGTAAAGTAACATGCCACGATATCATCAACAGTCCTGAA	94
Qy	851 TCGGCTACGGCTTCTCGCCACCTGCCAAAGTTAAGTACCGCTACTACGACTTAA	91
Db	945 CAGRAGGCTCTGGCCAGCTTACATTACCCAAACTGTCCTTACTGAACTTGTGAA	101
Qy	911 ATCTGTTTGGCCAGTTAGGTATTACCAAAAGTTTCAACGTTGAGGTGAGTGG	97
Db	1005 GAGGCTCTGGTCAACTGGCATACTAAGGTTCTCAGGCAATGGGCTGACCTCCGG	10
Qy	971 TGTTACTGAGAACGACTCCATTAAATTGAGTAAGCTGTTCAAAAGCCCTTAACACT	10
Db	1065 GTTACAGGAGGAGGACCTGGTCAACTGGCATACTAAGGTTCTCAGGCAACACTAA	11
Qy	1031 TGAAGAAAGGTTACCGAGGCCGGCGCTATGTTCTGGAAAGCTTATCCTAAAGCAT	10
Db	1125 CGAAGGAGGGGGACTGTCGAAGCTCTGGGGCATGTTTACAGGCCATACCAATGTC	11
Qy	1091 TCCACACAGGTTAAATTAAACCATTCGTTTCTGAGTGTGAGCAACACTAA	11

Db 1185 ccccccaaggtaaagtccaaacccttgcgttcattatgtgaaaaataccna 1244  
 Qy 1151 AGCCCATTTGTTATGGTAAGGTTCACCCAACTCAGAA 1192  
 Db 1245 GTCCTCCCTCTCATGGAAAAGTGTGTAATCCCACCCAAA 1286

## RESULT 13

AAV41726 ID AAV41726 standard; DNA: 1185 BP.  
 XX AC AAV41726;  
 XX DT 20-NOV-1998 (first entry)

XX Native coding sequence of mature alpha1-antitrypsin (AAT).

DE Protein expression; monocotyledon plant cell; glycosylated antithrombin III; ATII; human serum albumin; HSA; subtilisin BPN'; treatment; emphysema; antithrombotic; blood replacement; ss.

OS Homo sapiens.

XX PN W09836085-A1.

XX PD 20-AUG-1998.

XX PF 13-FEB-1998;

XX 98WO-US030968.

PR 13-FEB-1997;

PR 13-FEB-1997;

PR 13-FEB-1997;

PR 13-FEB-1997;

XX 97US-0037991.

PR 97US-0038168.

PR 97US-0038169.

PA (PHYT-) APPLIED PHOTOGICS INC.

XX PI Rodriguez, RL, Sutliff TD;

XX WPI: 1998-467179/40.

DR P-PSDB; AAW59839.

XX Expressing mature, glycosylated proteins in monocotyledonous plant

PT cells - from chimeric gene including signal peptide sequence, PT specifically therapeutic agents and industrial enzymes

PS Disclosure: Page 29; 53pp; English.

XX The present sequence represents the native coding sequence of mature alpha1-antitrypsin (AAT). The protein is used to exemplify the invention. The specification describes a method for producing mature heterologous protein in monocotyledonous plant cells. The method comprises transforming the cells with a chimeric gene comprising a monocotyledon transcription regulator, inducible either during seed maturation or by adding/removing a small molecule, DNA encoding the heterologous protein, and DNA encoding a signal peptide, with the signal peptide causing secretion of the protein from the cell. Proteins expressed in this manner include mature glycosylated alpha 1-antitrypsin (AAT) with a glycosylation pattern that significantly increases its serum half-life, mature glycosylated antithrombin III (ATIII), mature human serum albumin (HSA) having the native folding pattern as shown by bilirubin-binding characteristics, or mature active subtilisin BPN'. These proteins are useful therapeutically (e.g. AAT for treating emphysema, ATIII as antithrombotic and HSA as blood replacement) or as industrial enzymes (BPN' is used in detergents).

XX Sequence 1185 BP; 328 A; 283 C; 250 T; 0 other;

Query Match Score 429; DB 19; Length 1185;

Best Local Similarity 60.2%; Pred. No. 7.1e 98;

Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

Qy	12 GAAGACCCCTCAAGGGACGCCGCTCAAAAAACCGACACCAGTCATCACGACCAAGCCAT 71
Db	1 GAGGATCCCAAGGGAGATCTGCCCAAGAGATCATCCCACTATGATAGGATCAC 60
Qy	72 CGGACTTAAATAATTACTCCAAATTAGCGGAATTGCGTTTTTGTATAGACAA 131
Db	61 CCAAACCTCAACAGATCACCCCAACCTGGCTGAGTCGCCTACGCCCTAACGGCAG 120
Qy	132 TTACCTCATCAAATTAATTCTACTAACTTATGTTAGTTAGGAAAGTTAGAAGGTTA 191
Db	121 CTGGCACACCACTCCACACGCCAAACGACCAATATCTCTCCCCAGTGACATCCCTAGGCC 180
Qy	192 TTGGCCATGTTGAGTTAGTTAGGAACTACCATGACGATACCGATACTCACGATCAAATCTGGAC 251
Db	181 TTGCAATGCTCCCTGGACCAAGCTGACATCACGATCAAATCTGGCTG 240
Qy	252 AACPTTAATTGACCGAAATCCCGAACGCCCCAATTACGAGGGTTTCAGAGTTGTT 311
Db	241 AAATTCACCTCACGGAGATTGGAGCTCAGATCATGAGGGCTCCAGAACCTCTC 300
Qy	312 AGAACTTGAATCACCTTAATCTCAATTGCAATTGCAATTGACGTTTATTTTGTT 371
Db	301 CGTACCCCTAACACGCCAGACGCCAGTCCACCCGCACTGGCTGTCTCTC 360
Qy	372 TCTGAAGGTTAAATGGTACAATTCTAGAAACGCTCAAGAAACTATATCATAGT 431
Db	361 AGCPAGGGCTGAGCTAGGATGTTGGGATGTTAACAGTGGCTTACCACTCA 420
Qy	432 GAGGCCTTACCGTTAAATTGGTGTACTGAGAAGCTAAAGCAATTATGATAT 491
Db	421 GAACCCCTCACGTCACTTCAGCTCACCTCGGGACACCGAACGAACTAACGATCAC 480
Qy	492 GTTGAGAAGGACCCAGGGTAAGTGTACCTGAGCTTAAGAATTAAGTGTGATACCC 551
Db	481 GTGGAGAAGGGTACTCTAGGGAAANTGGTGTCAAGGAGCTGACAGAGACACA 540
Qy	552 GTCTTCGCACTAGTAACTATATTTTCAAGGTAAAGTGGAAACTCCCTTCGAGTT 611
Db	541 GTTTTGGCTCTGGTGAATACATCTTAAAGGAAATGGGACACCCCTTGAATCT 600
Qy	612 AAAGATACTGAAGGGAGATTTCTGATGTCAAATTACTGTCAAAGTTCCAATG 671
Db	601 AAAGAACCCGAGAACGGACTTCCACCTGGACCTGACCTGGCTGCTATG 660
Qy	672 ATGAAAGACTGGTAGTTCATATPAACTAACATCCAGCTTAACTACATCGCT 731
Db	661 ATGAAAGCCTTTAGGCACTTAACTACATCCAGCTGTAGANGCTGTCAGCTGGCTGCTG 720
Qy	732 TTATGAGTTAGGAACTGCTACTGCTATTTTTACCAAGCAGAGGTAACTT 791
Db	721 CTCATGAAATACCTGGCAATCTCCACCTCTTCCTGCTATGAGGAACTAA 780
Qy	792 CAACATTAGAGATGAGTTGACTCATGACATTAACTAAATTAGAACGGAGAT 851
Db	781 CACCACTGGAAAATGACTCACCCAGATCATACCAAGTTCGGAAAATGAGAC 840
Qy	852 CGCGTACCCCTCTCCACCTGCCAAGTAACTGTCAGCTTACGGTACTAGCTAA 911
Db	841 AGAGGTCTGCCAGCTTACATTACCCAAACTGTCCATTACTGAACTCTATGTCAG 900
Qy	912 TCGTTTAAGGCAAGTGTAGGTTATCAGAAAGTTTCTAACGGTGCAGTTGAGTGT 971
Db	901 AGGGTCTGGCAACTGGGCACTAACGGGCTTACATGGCTTACGGTCTCCGGG 960
Qy	972 GTTACTGAGAAGCTCCATTAAATTAGTAAGCTTCACAAAGCCTTAACCTART 1031
Db	961 GTCACAGGAGGACCCCTGAGGTCCAGGCCATGAGCTGACCATGCTGACCATC 1020
Qy	1032 GATGAAAGGGTACCGGGCCGGCTATGTTCTGGAGCATTCCAAATGACCAT 1091
Db	1021 GACGGAGAAGGGACTGGAGCTGAGCTGGCCCATACCCATGTCATC 1080
Qy	1092 CCACCAAGAGTTAAATTAAACCATTCGTTCTGATGATCGAGCAACACTAA 1151

REF ID: T15

ABL67511 standard; DNA; 1352 BP.  
 ID ABL67511;  
 XX  
 AC  
 XX  
 DT 15-MAY-2002 (first entry)

Thyroid cancer related gene sequence SEQ ID NO:5848.

DE Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;  
 KW carcinoma; antitumour; pancreatic; carcinomatous;  
 KW cytostatic; lung; prostate; gene therapy; anticancer;  
 KW gene; ds.  
 XX  
 OS Homo sapiens.  
 XX  
 WO200104629-A2.  
 PN  
 PR 05-JUN-2000; 20000US-209473P.  
 PR 05-JUN-2000; 20000US-209331P.  
 PR 18-SEP-2000; 20000US-233133P.  
 PR 18-SEP-2000; 20000US-233617P.  
 PR 20-SEP-2000; 20000US-234009P.  
 PR 20-SEP-2000; 20000US-234034P.  
 PR 20-SEP-2000; 20000US-234052P.  
 PR 22-SEP-2000; 20000US-234509P.  
 PR 22-SEP-2000; 20000US-234567P.  
 PR 25-SEP-2000; 20000US-234923P.  
 PR 25-SEP-2000; 20000US-234924P.  
 PR 25-SEP-2000; 20000US-235077P.  
 PR 25-SEP-2000; 20000US-235082P.  
 PR 25-SEP-2000; 20000US-235134P.  
 PR 26-SEP-2000; 20000US-235180P.  
 PR 26-SEP-2000; 20000US-235637P.  
 PR 26-SEP-2000; 20000US-235638P.  
 PR 27-SEP-2000; 20000US-235711P.  
 PR 27-SEP-2000; 20000US-235720P.  
 PR 28-SEP-2000; 20000US-235840P.  
 PR 28-SEP-2000; 20000US-235863P.  
 PR 28-SEP-2000; 20000US-235628P.  
 PR 28-SEP-2000; 20000US-235632P.  
 PR 28-SEP-2000; 20000US-236033P.  
 PR 28-SEP-2000; 20000US-236034P.  
 PR 28-SEP-2000; 20000US-236109P.  
 PR 29-SEP-2000; 20000US-236111P.  
 PR 29-SEP-2000; 20000US-236842P.  
 PR 29-SEP-2000; 20000US-236911P.  
 PR 02-OCT-2000; 20000US-237120P.  
 PR 02-OCT-2000; 20000US-237173P.  
 PR 02-OCT-2000; 20000US-237278P.  
 PR 02-OCT-2000; 20000US-237294P.  
 PR 02-OCT-2000; 20000US-237295P.  
 PR 01-NOV-2000; 20000US-244867P.  
 PR 01-NOV-2000; 20000US-245084P.  
 XX  
 (AVAL-) AVALON PHARM.

PT chemical agent to be tested for anti-neoplastic activity, and  
 PT determining a change in expression of a gene of a signature gene set -  
 XX  
 PS Claim 1; SEQ ID 5848; 44pp; English.

CC The present invention describes a method (M1) for screening for an  
 CC anti-neoplastic agent. The method involves exposing cells to a chemical  
 CC agent to be tested for anti-neoplastic activity, determining a change in  
 CC expression of at least one gene (I) of a signature gene set, where (I)  
 CC comprises a sequence (S) selected from 8447 sequences (given in ABL6164  
 CC to ABL7010), or is at least 95% identical to (S), where a change in  
 CC expression is indicative of anti-neoplastic activity. (I) has cytostatic  
 CC activity and can be used in gene therapy. M1 can be used for screening  
 CC an anti-neoplastic agent, and can be used for producing a product which  
 CC is the data collected with respect to the anti-neoplastic agent as a  
 CC result of M1, and the data is sufficient to convey the chemical  
 CC structure and/or properties of the agent. M1 can be used in the  
 CC treatment of cancer such as colon, breast, stomach, lung, thyroid,  
 CC oesophageal, ovarian, kidney, prostate or pancreatic cancer.  
 CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,  
 CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine  
 CC carcinoma, papillary carcinoma and Wilms' tumour.

XX Sequence 1352 BP; 349 A; 386 C; 325 G; 292 T; 0 other;

Query Match	28.1%	Score 429;	DB 24;
Best Local Similarity	60.2%	Pred. No. 7.4e-98;	
Matches 711;	Conservative 0;	Mismatches 470;	Indels 0;
Gaps 0;			
Qy	12 GAAGACCCCTCAGGCCACGGCGCTCAAAAACCGAACAGTCACTACCAAGAACCCAT 71	Db	92 GAGGATCCCCAGGGAGATGCTGCCAGANGACAGATACTCCCACCATGATCAGGATCAC 151
Qy	72 CGGACTTTAAATAAAATTACTCCAAATTAGCCGAATTAGCGAAATTGCTCTTTCTGTATAGACAA 131	Db	152 CCAACCTTCACAGATTCACAGATTCACCCCAACCTCGCTGAGTTGCCTTAGCTACGCC 211
Qy	132 TTAGCTCATCAAAGTAATTCTACTAACATTCTTGTCTCTTTAGTCTCTATTGCACTGCT 191	Db	212 CTGGCACACAGTCACCCACCAATACCTCCTCCAGTGAATCTGCTACAGGC 271
Qy	192 TTGGCGATGTTGAGTTAGTTACTAAAGCGATACCCATGACGAGATTAGAGGTATA 251	Db	332 AAUTTCACCTTCACCGGATTCGGAGATTCGGAGGTCTCAGATCAGTCAATGAAAGCTCT 391
Qy	272 TTGGCATGTCCTCTCCCTGGGACCAAGGGTGACACTACGATGAAATCTGGGGCGCTG 331	Db	392 CGTACCTCACCACGGCTGAAGCTAGTGGATAAGTTGGAGATGTTGGAGATCACCICA 511
Qy	372 TCTGAGGTAAATTTGTTGACAATTCTAGAAGAGCTCAAATCTATCATAGT 431	Db	452 AGCGAGGGCCTGAAGCTAGTGGATAAGTTGGAGATGTTGGAGATGTTGGAGATCACCICA 511
Qy	432 GAGGCTTTACCGTTAAATTGGGATACTGAGGAAGCTAAAGCAATTATGATAT 491	Db	512 GAAGGCTTCACTGTCACATGTCACACTCGGGACACGGCAAGAAACATCAACGATTC 571
Qy	492 GTTGAAGAAGGCCACGGCTAAATGCTGTTGACCTAGTTGACATGTTGACATGATCACA 551	Db	572 GTGGAGAAGGGTACTCAAGGAAATGNGGATTGGTCAGGGCTGACAGAGACCA 631
Qy	552 GTCCTGCACTGTTAACTATTTTCAAGGTAAGTGGRAACCTCTTTCGAGGTT 611	Db	632 GTTTTGTCTGGTGAATTACATCTCTTTAAAGCAATGGAGAGACCCCTGAAGTC 691
Qy	612 AAATACATGAAAGGAAATTTCATGTTGACAAGGTTACTACTGCAAAGTTCAGATG 671	Db	692 AAGGACCCGAGGAGGACTTCAGCTGGGACCCGAGGACTTCAGCTGGCCPATG 751

Screening for anti-neoplastic agent involves exposing cells to a

Qy	672	ATGAAAAGACTGGTATGTTCAATACTAACATTGGAAAAAAATTAAGTTCTGGGTCTTA	731
Db	752	ATGAAAGCCTTTAAGCAGTTAACATCAGCTGTAGAACCTGTGGGCTG	811
Qy	732	TAAATGAAGTATTAGTAACCGTACTCGTATTTTTTACACAGAAAGTAAGCTT	791
Db	812	CTGNTGAATAACCTGGCAATGCCACCTTCCTCCNGCTATGAGGGAAACTA	871
Qy	792	CAACATTAGAAATGAGTTGACTCATGACATTATTAACATTAGAAACGAGGAT	851
Db	872	CAGGACCTTGAAATGAACCTACCCACATRATCATACCAAGTTCTGGAAATGAGAC	931
Qy	852	CCTGTTAGGGCTCTCTGCACCTGCCAAAGTTAAAGTATCACCGTACTAACGCTTAAA	911
Db	932	AGAAGGTCTGCACCTTACATTACCCAAACCTCCATTACGGAAACCTATGTCAG	991
Qy	912	TCTGTTTAGGCCAGTTAGTATTACCAAGTTTCTCAAGGTTGCGATTGAGTGGT	971
Db	992	AGCGTCTTGGTCACCTGGCAICACTAAGCTTCAAGCAATGGGTGACCTCTCGGG	1051
Qy	972	GTTACTGAAAGCTCCATTAAATTGAGTAAGCTGTTCAAAGCGGTCTTAACATT	1031
Db	1052	GTCACAGGGGACCCCTGAACTCTCCAAAGCCGTGCAATTGGCTGTGACCATC	1111
Qy	1032	GATGAAAAGGTACCGAGGCCGGCGCTATGTTCTGGAAAGCTTCCAAATGAGGATT	1091
Db	1112	GAACGAAAAGGAGCTGAAGCTGGCGCATTTAGGCCATACCCATGTCATC	1171
Qy	1092	CCACCAAGTTAAATTAAACCATCTGTTCTGATGATCGAGAACACTAA	1151
Db	1172	CCCCCGAGGTCAAGTCAACAAACCCPTGTCTCTAATGATGACAAATACCAAG	1231
Qy	1152	AGCCCATTTGTTATGGTAAGGTGTCACCCAACCTAGAA	1192
Db	1232	TCTCCCTCTCATGGAAAAGTGGTAATCCCAACCCAAA	1272

Search completed: December 6, 2002, 23:44:55  
 Job time : 238.5 secs